

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Cancel Claims 1 – 12.

13. (new) A system for monitoring when chemicals in a development process need replenishing, **characterised by** a reference strip bearing a developed graduated scale of exposure of a radiation sensitive medium to a range of exposures, a testing module comprising a radiation shielded pouch and an unexposed radiation sensitive medium within the pouch, said module including a radiation filter for producing a graduated scale of a range of exposures to radiation on a test strip when it is exposed to radiation and subsequently developed, said scale on the test strip being identical to that on the reference strip when the test strip is exposed to the same radiation and developed in a developing bath with an acceptable chemical level and composition, as that used to produce the scale on the reference strip, means for comparing the scales on the reference and test strips side-by-side, the test strip and the reference strip each having a datum indicia that align when the test strip and the reference strips are in a datum position relative to each other where the scale on the test strip matches the scale on the reference strip, and one or both strips having limits indicia that together define an acceptable range of variation of the graduated scales of the test strip compared with the test graduated scale of the reference strip when the test strip is moved relative to the graduated scale of the reference strip

away from said datum position in a direction along the scale of the reference strip to bring a selected first region of the graduated scale of the test strip in alignment with a matching region of the graduated scale of the reference strip

14. (new) A system according to Claim 13 wherein the datum indicia comprises a reference line on each strip that aligns with each other when the strips are in the datum position, and one or both of the strips have a second line spaced from the first line in a direction measured along the direction that the scales extend that defines a limit of acceptable relative displacement of the test strip along the scale of the reference strip.
15. (new) A system according to Claim 13, wherein the pouch is provided with a radiation filter or mask that defines two bands of varying thickness so that when the strip is exposed to radiation, two graded scales of varying grey scales are produced on the strip when the film is developed.
16. (new) A system according to Claim 15, wherein the band of the filter has uniform step changes in thickness rather than a gradual change in thickness.
17. (new) A system according to Claim 13, wherein the test strip has a numerical scale printed on it corresponding to each step change of density of the mask.

18. (new) A system according to Claim 17, wherein the test strip has indicia comprising two lines marked to indicate "safe" and "fail", respectively, at one end of the scale.
19. (new) A system according to Claim 15, wherein the reference strip has identical indicia and markings to that of the test strip.
20. (new) A system according to Claim 13, wherein the pouch is incorporated in a cassette of a film plate.
21. (new) A system according to Claim 20, wherein the cassette is provided with a graduated radiation filter or mask that creates the graduated scale of the test strip on the film.
22. A method of testing when chemicals in a development process need replenishing comprising the steps of:
 - a) providing a system according to Claim 13;
 - b) placing a test strip in the sealed pouch and exposing the sealed pouch to radiation;
 - c) removing the test strip from the pouch in a darkroom environment and processing the test strip in a development bath the composition and contents of which is to be tested to produce a developed test strip;

- which is to be tested to produce a developed test strip;
 - d) comparing the developed test strip with the reference strip by laying the strips alongside each other;
 - e) moving one strip relative to the other in a direction along the graduated scales until a selected region of the graduated scales of the test strip matches a selected region of the graduated scale of the reference strip and thereby establish a matched position;
 - f) comparing the position of datum indicia of one of the strips with the limits indicia of the other strip when the strips are in said matched position, and
 - g) assessing whether the datum indicia of one strip is between the limits indicia of the other strip thereby to assess whether the chemicals in the processing bath need replenishing.
23. (new) A method according to Claim 22, wherein the reference strip is fixed in place on an illuminated background and the test strip is moved axially relative to the reference strip until one of the density steps matches one of the density steps of the reference strip.
24. (new) A method according to Claim 22, wherein the datum indicia is a reference line and the limits indicia comprise the reference line and a second line.